# Language Difficulties Associated with Hearing Loss (Congenital or Acquired)

Most people develop speech and acquire communicative skills abilities without much effort, within the framework of the typical developmental path.

However, there are cases where this development is hindered by causes such as <a href="hearing loss">hearing loss</a>
— either congenital or acquired — which is a decline in auditory acuity that can seriously affect the child's access to sound from the beginning of life. The language development of infants with hearing loss is often is undermined, resulting in developmental stages, such as crawling, being delayed or are differentiated (Oller, 2000). This observed delay leads to language difficulties, which become more evident at school age, affecting learning, socialization and psycho-emotional development.

#### **Prevalence and Etiology**

According to the World Health Organization (2024), approximately 34 million children have hearing loss. In Europe, the percentage of children with severe hearing loss estimated at 1-2 per 1,000 births. Hearing loss can be due to genetic factors, congenital anomalies, infections, injuries or exposure to ototoxic medications. Depending on the type and severity, we distinguish three main categories hearing loss:

- Conduction (<60 dB HL), often treated medically, e.g. due to middle otitis.
- Sensory-neuro, which often requires technological assistance (hearing aids or cochlear implants).
- Mixed form, with combined characteristics.

Even mild forms (e.g. 10–15 dB HL) can make it difficult to perceive sound speech, especially in noisy environments, such as school classrooms.

### **Characteristics of Language Difficulties**

The effect of hearing loss on language development depends on factors such as: age of onset and diagnosis, consistency of hearing aid use, linguistic environment and the degree of linguistic complexity. Children with very severe hearing loss or deafness (>90 dB HL), as in sensorineural hearing loss great difficulty in acquiring intelligible speech, while those children who have a loss of <90 dB HL can have significant benefit from intervention due to large auditory.

Children with significant hearing loss experience:

- limited vocabulary,
- phonological errors (e.g. deletion of sounds, nasalization, neutralization),
- difficulties in producing and understanding complex language structures,
- reduced understanding of prosody and the most important elements of speech.

In children under 3 years of age with severe loss, the articular effects are more pronounced. Unilateral hearing loss may not visibly affect articulation, but it does sound localization and comprehension in noisy environments.

# **Intervention and Rehabilitation**

Early detection through newborn hearing screening is crucial. Timely provision hearing aids (HA) or cochlear implants (CI) is accompanied by personalized oral intervention programs, such as aural/oral or auditory verbal therapy, which focus on the development of the auditory canal through acoustics attention, phonetic production and language comprehension. Research shows that children who receive early EC show better performance in phonological development (Ertmer & Goffman, 2011). Particular emphasis is given to the macrostructure of discourse (e.g. narrative ability), which is related to functional literacy (Arráez Vera et al., 2025).

In some cases, total communication (a combination of oral language, sign language, writing, gestures and expressions), while in other schemes bilingual education is applied (sign language and Greek).

# **Bibliography**

Arráez Vera, G., Gonzálvez, C., & Ros, NA (2025). The Effectiveness of Linguistics Intervention in Children With Hearing Loss: A Systematic Review and MetaAnalysis. Journal of speech, language, and hearing research: JSLHR, 68(5), 2656–2673. https://doi.org/10.1044/2025 JSLHR-24-00589.

Ertmer, DJ, & Goffman, LA (2011). Speech production accuracy and variability in young cochlear implant recipients: Comparisons with typically developing age-peers. Journal of Speech, Language, and Hearing Research, 54, 177–189

Ertmer, DJ, Young, NM, & Nathani, S. (2007). Profiles of vocal development in youth cochlear implant recipients. Journal of Speech, Language, and Hearing Research, 50, 393–407. https://doi.org/10.1044/1092-4388(2007/028).

Oller, DK. (2000). The emergence of the speech capacity. Mahwah, NJ: Erlbaum.

World Health Organisation. (2024). Deafness and hearing loss [Fact sheet]. Retrieved June 29, 2025, from https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss